

What is claimed is:

1. A photosensitive material processing rack  
detachably fitted into a processing tank containing  
5 processing solution to feed a photosensitive material in  
said processing solution, said photosensitive material  
processing rack comprising:

a housing;

10 a feed roller pair provided in said housing, said  
feed roller pair feeding said photosensitive material along  
a feeding path in said processing tank; and

15 a weight detachably loaded into and/or onto said  
housing, said weight stably fixing said rack in said  
processing tank against buoyant force exerted on said rack  
in said processing solution.

2. A photosensitive material processing rack as  
recited in claim 1, wherein at least one hollow portion  
is formed in said housing, and said weight is loaded into  
20 said hollow portion.

3. A photosensitive material processing rack as  
recited in claim 2, satisfying the following formulas:

$$\beta > (V \times \alpha - W) / X$$

25  $V \times \alpha > W$

wherein,  $W$  is the weight of said rack without said weight,  
 $V$  is the volume of a part of said rack soaked in said  
processing solution,  $\alpha$  is the specific gravity of said  
processing solution,  $\beta$  is the specific gravity of said  
30 weight, and  $X$  is the volume of said weight.

4. A photosensitive material processing rack as recited in claim 3, satisfying the following formula:

$$X \leq v$$

wherein,  $v$  is the volume of said hollow portion formed inside 5 said housing.

5. A photosensitive material processing rack as recited in claim 3, wherein the gravity  $\alpha$  of said processing solution and the gravity  $\beta$  of said weight satisfy the 10 following formula:

$$\beta \geq \alpha$$

6. A photosensitive material processing rack as recited in claim 2, wherein said housing comprises:

15 an inlet for loading said weight into said hollow portion; and

a lid detachably fitted over said inlet,

wherein said inlet is positioned above the liquid level of said processing solution when said weight is loaded 20 into said housing.

7. A photosensitive material processing rack as recited in claim 2, wherein said housing comprises plural members, said plural members are so welded to each other 25 as to form said hollow portion between said plural members, and a welding surface of said members is positioned above the liquid level of said processing solution.

8. A photosensitive material processing rack as 30 recited in claim 2, wherein said weight is liquid.

9. A photosensitive material processing rack as recited in claim 2, wherein said weight is solid grains or pellets.

5 10. A photosensitive material processing rack as recited in claim 9, wherein said weight is made out of PET (polyethylene terephthalate) or PBT (polybutylene terephthalate).

10 11. A photosensitive material processing apparatus comprising:

plural processing tanks containing processing solution;

15 a rack detachably fitted into each of said processing tanks, said rack having a feed roller for feeding a photosensitive material in said processing solution; and

20 a weight detachably loaded into and/or onto said rack, said weight stably fixing said rack in said processing tank against buoyant force exerted on said rack in said processing solution.

12. A photosensitive material processing apparatus as recited in claim 11, wherein at least one hollow portion is formed in said rack, and said weight is loaded into said 25 hollow portion.

13. A photosensitive material processing apparatus as recited in claim 12, satisfying the following formulas:

$$\beta > (V \times \alpha - W) / X$$

30  $V \times \alpha > W$

wherein,  $W$  is the weight of said rack without said weight,  
 $V$  is the volume of a part of said rack soaked in said  
processing solution,  $\alpha$  is the specific gravity of said  
processing solution,  $\beta$  is the specific gravity of said  
5 weight, and  $X$  is the volume of said weight.